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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/696,006	10/26/2000	Hiroki Doi	0717-0448P	3457	
7	590 07/24/2003				
BIRCH, STEWART, KOLASCH & BIRCH, LLP			EXAMI	EXAMINER	
P. O. Box 747 Falls Church, V	/A 22040-0747		LAIR, DO	NALD M	
			ART UNIT	PAPER NUMBER	
		·	. 2050		

DATE MAILED: 07/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	/			
Advisory Action	09/696,006	DOI ET AL.				
	Examiner	Art Unit				
	Donald M. Lair	2858				
The MAILING DATE of this communication app	pears on the cover sheet with the	correspondence addre	ess			
THE REPLY FILED 02 July 2003 FAILS TO PLACE T Therefore, further action by the applicant is required to final rejection under 37 CFR 1.113 may <u>only</u> be either: condition for allowance; (2) a timely filed Notice of App Examination (RCE) in compliance with 37 CFR 1.114.	avoid abandonment of this appli (1) a timely filed amendment wh	cation. A proper replication in the case of the case of the capplication.	ly to a ation in			
PERIOD FOR F	REPLY [check either a) or b)]	1				
a) The period for reply expiresmonths from the mailing b) The period for reply expires on: (1) the mailing date of this A event, however, will the statutory period for reply expire later ONLY CHECK THIS BOX WHEN THE FIRST REPLY WA 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The chave been filed is the date for purposes of determining the period of extensions of time that the date form: (1) the expiration date of the shorten (b) above, if checked. Any reply received by the Office later than three rearned patent term adjustment. See 37 CFR 1.704(b).	dvisory Action, or (2) the date set forth in the than SIX MONTHS from the mailing date on the set of the set o	of the final rejection. IE FINAL REJECTION. Se  136(a) and the appropriate e fee. The appropriate extent the final Office action; or (	ee MPEP extension fee ension fee under 2) as set forth in			
1. A Notice of Appeal was filed on Appellar 37 CFR 1.192(a), or any extension thereof (37 C	nt's Brief must be filed within the FR 1.191(d)), to avoid dismissal	period set forth in of the appeal.				
2. The proposed amendment(s) will not be entered because:						
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);						
(b) ☐ they raise the issue of new matter (see Note below);						
<ul><li>(c) they are not deemed to place the application issues for appeal; and/or</li></ul>	n in better form for appeal by ma	terially reducing or si	implifying the			
(d) they present additional claims without cand NOTE:	eling a corresponding number of	finally rejected claim	ns.			
3. Applicant's reply has overcome the following rej						
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).						
5. ☑ The a) ☐ affidavit, b) ☐ exhibit, or c) ☑ request application in condition for allowance because:	for reconsideration has been con Arguments are attached.	sidered but does NO	T place the			
6. The affidavit or exhibit will NOT be considered by raised by the Examiner in the final rejection.	pecause it is not directed SOLELY	f to issues which wer	re newly			
7. For purposes of Appeal, the proposed amendme explanation of how the new or amended claims	ent(s) a)□ will not be entered or would be rejected is provided be	b)  will be entered a low or appended.	and an			
The status of the claim(s) is (or will be) as follow	<b>/</b> S:					
Claim(s) allowed:						
Claim(s) objected to:						
Claim(s) rejected:						
Claim(s) withdrawn from consideration:						
8. The proposed drawing correction filed on	The second his the Free lines					
9. Note the attached Information Disclosure Staten	The state of the s					
Other: N. Le						
	Supervis Techno	N. Le ory Patent Examiner ology Center 2800				

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## **ADVISORY ACTION**

## Response to Arguments

- 1. The response filed on 07/02/03 under 37 CFR 1.131 has been considered but is ineffective to overcome the Kalb, Jr. reference.
- 2. The amended claim language of Claims 1 and 17 fail to accurately describe the features that create the differences between Kalb, Jr. and the current Application. While the limitation of "... so that a driving current driving at least one Hall device of the plurality of Hall devices is a current adjusted amount of a driving current driving another Hall device through a corresponding terminal of the plurality of terminals." could be interpreted to describe the constant supplies providing an additional current to each of the Hall devices, as shown in Fig. 1. It could also be easily interpreted to describe the invention of Kalb, Jr. wherein a current adjusted amount could be due to a current drop in the Hall device and the output current then drives the next Hall device.
- 3. According to the MPEP (section 2106) claims are to be given their *broadest reasonable interpretation* in light of the supporting disclosure (*In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997)) and that limitations appearing in the specification but not recited into the claim are not read into the claim (*In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)).
  - 4. The Applicant submits that

"Kalb, Jr. fails to teach the structural limitation of "a driving current ... is a current adjusted amount ... through a corresponding terminal of the plurality of



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terminals," in the context of terminals applying a bias voltage to a plurality of Hall devices connected in series";

and

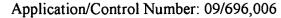
- "... the device does not consist of a plurality of terminals for applying the bias voltage. Rather, Kalb teaches at most a single terminal that supplies a reference voltage."
- 5. However, it is clearly reasonable to interpret Kalb, Jr. in this manner. Specifically, Kalb, Jr. does in fact teach applying a bias voltage to the plurality of terminals. Column 3, lines 25 and 26 read as "... the gate of a first MagFET is configured to be biased at a reference voltage...", Column 4, lines 35 and 36 read as "... each of the MagFETs are configured to operate at threshold.", and finally Column 5, lines 11 31 clearly show that each of the MagFETs are biased to a reference voltage through a corresponding terminal.
- 6. In Page 3, paragraph 2, the Applicant states that the Kalb reference "do[es] not, as in the claimed invention, serve to adjust the current driving another Hall device, i.e. because there is no current flowing through each of the devices." Even if one were to interpret the claim language the way the Applicant is, which is not the broadest reasonable interpretation, the Kalb reference discloses a configuration wherein current flows directly from one hall device to a next hall device as prior art, referring to Fig. 2 and in Column 2, line 42 Column 3, line 2.
- 7. Regarding the Applicant's arguments referring to the 35 U.S.C § 103 rejections, the Applicant states "Foster does appear to teach a constant voltage driving system for a Hall device" (Response: Page 4, paragraph 4). The Examiner agrees with this statement. The Applicant further states "Foster's device is not temperature dependent... Foster's device includes



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one voltage regulator for one Hall device." It is unclear how these statements relate to the claim language in question. The Applicant goes on to state "However, like Kalb, Jr. Foster's device also fails to teach a plurality of Hall devices connected in series in combination with a constant voltage supply section for supplying a constant bias voltage to each of the plurality of Hall devices" but while the Applicant has stated that he does not concede that the Hall devices disclosed by Kalb, Jr. are series connected he has also failed to argue convincingly that they are not series connected. The Applicant states that "In Foster's device, the Hall devices are connected in parallel. Thus, in either Kalb, Jr. or Foster the system would require a driving current in proportion to the number of Hall devices." The Applicant has given neither a specific area within the respective disclosures to support these statements, or an explanation as to why these arguments are relevant to the claim language. Further, the applicant has failed to make a thorough and convincing argument against the motivation to combine the Kalb, Jr. and Foster references.



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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald M Lair whose telephone number is (703) 305-4450. The examiner can normally be reached on Monday - Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1436.

Donald M Lair Patent Examiner

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July 21, 2003